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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/533,785	05/04/2005	Jeroen Wigard	60091.00389	6075

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EXAMINER	
SANTIAGO CORDERO, MARIVELISSE	

ART UNIT	PAPER NUMBER
2617	

DATE MAILED: 09/21/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/533,785	WIGARD ET AL.	
	Examiner	Art Unit	
	Marivelisse Santiago-Cordero	2617	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *13 July 2006*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-26* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-26* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Response to Arguments

1. Applicant's arguments filed on 7/13/06 have been fully considered but they are not persuasive.

Applicant argues that Raitola (WO 01/63851) contains no discussion that minimum bit rates would be used as bit rate allocation portions in bit rate allocation (Remarks: page 20, 1st full paragraph). In response, the Examiner respectfully disagrees. Raitola's Figs. 3-4 and 7b; page 17, lines 21-26, page 19, lines 26-29, and page 20, lines 11-16 disclose that minimum bit rates would be used as bit rate allocation portions as claimed (see e.g., Figs. 3 and 7b, wherein the minimum allowed peak bit rate is 128 kbps and Fig. 4, 3rd step.

Claim Objections

2. Claims 5-6 are objected to because of the following informalities: the term "the maximum transmission power threshold" should be replaced with --a maximum transmission power threshold-- since no threshold has been claimed before. Appropriate correction is required.

3. Claims 13-14 are objected to because of the following informalities: the term "descreaser" should be replaced with --decreaser--. Appropriate correction is required.

Claim Rejections - 35 USC § 112

4. The following is a quotation of the first paragraph of 35 U.S.C. 112:

> The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

5. Claims 1-26 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

Regarding all of the independent claims, the limitation "by using minimum bit rates as bit rate allocation portions" was not described in the specification. Specifically, the limitation "as bit rate allocation portions" was not described.

Applicant is welcomed to point out, where in the specification the Examiner can find support for this limitation, if Applicant believes otherwise.

6. The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

7. Claims 1-26 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding all of the independent claims, the limitation "by using minimum bit rates as bit rate allocation portions" is unclear. It is not clear what is meant by the limitation "as bit rate allocation portions".

Claim Rejections - 35 USC § 102

8. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

9. Claims 1-26 are rejected under 35 U.S.C. 102(b) as being anticipated by Raitola et al. (hereinafter "Raitola"; WO 01/63851 A1).

Regarding claim 1, Raitola discloses a data transmission method comprising: determining a number of bit rate classes (Fig. 3; page 20, lines 18-22); setting minimum bit rates for the bit rate classes (Figs. 3-4; page 20, lines 18-22); setting a general minimum bit rate (Figs. 3-4); setting a maximum transmission power target (Figs. 3-4; page 10, lines 10-11); arranging resource requests into a queue (Fig. 4); and allocating resources in a telecommunication system according to the requests in the queue by using the minimum bit rates as bit rate allocation portions until the maximum power target is achieved (Figs. 3-4).

Regarding claim 2, Raitola discloses a data transmission method comprising: determining a number of bit rate classes (Fig. 3; page 20, lines 18-22); setting minimum bit rates for the bit rate classes (Fig. 3; page 20, lines 18-22); setting a general minimum bit rate (Figs. 3-4); setting a maximum transmission power target (Figs. 3-7B; page 10, lines 10-11); arranging resource requests into a queue (Fig. 4); allocating resources in a telecommunication system according to the requests in the queue by using the minimum bit rates as bit rate allocation portions (Figs. 3-4); if the maximum transmission power target is not achieved when resources have been allocated to all users in the queue, increasing bit rates based on the queue until the maximum transmission power target is achieved (Fig. 4); and if the resource requests cause too much load in relation to the maximum transmission power target, decreasing the required number of bit rates in a predetermined way (Fig. 6; page 18, lines 5-10).

Regarding claim 3, Raitola discloses the method of claim 1, further comprising determining the bit rate classes based on a required quality of service (page 20, lines 18-28; note that bit rates are in fact quality of service).

Regarding claim 4, Raitola discloses the method of claim 1, further comprising setting the bit rate classes based on a quality of service, parameter, wherein the quality of service parameter comprises allocation retention priority (page 20, lines 18-32; note that the classes can be fairly characterized as being set on the basis of Allocation Retention Priority since bearers are prioritized).

Regarding claim 5, Raitola discloses the method of claim 2, further comprising: when the maximum transmission power threshold is exceeded, decreasing the bit rate by allocating to a user a general minimum bit rate (Fig. 7b; page 20, lines 10-16; note that the general minimum bit rate is 128 kbps).

Regarding claim 6, Raitola discloses the method of claim 2, further comprising: when the maximum transmission power threshold is exceeded, decreasing the bit rate by allocating to a user a class-specific minimum bit rate (Fig. 6; page 20, lines 10-28).

Regarding claim 7, Raitola discloses the method of claim 2, wherein the decreasing of the bit rates starts from a first user who has a bit rate higher than a general minimum bit rate (Fig. 7b; note that the general minimum bit rate is 128 kbps) and a lowest priority (Fig. 7b; note the second user from bottom to top), followed by a second user who has a bit rate higher than a class specific minimum bit rate and the lowest priority (Fig. 7b; note the first user, i.e., the bottom user).

Regarding claim 8, Raitola discloses the method of claim 2, further comprising: if a general minimum bit rate or a class specific minimum bit rate is allocated to the users (Fig. 7b) and the load remains too high (Fig. 7b), transferring a required number of users to a control channel (Fig. 7b).

Regarding claim 9, Raitola discloses a radio network controller (page 9, lines 4-5), comprising: a bit rate class determination unit configured to determine a number of bit rate classes (Fig. 3; page 20, lines 18-22); a bit rate setter unit configured to set minimum bit rates for the bit rate classes (Fig. 3; page 20, lines 18-22); a general bit rate setter unit configured to set a general minimum bit rate (Figs. 3-4; page 20, lines 18-22); a maximum transmission power target setter unit configured to set a maximum transmission power target (Figs. 3-7B; page 10, lines 10-11); a queue unit configured to arrange resource requests into a queue (Fig. 4); and a resource allocation unit configured to allocate resources according to the requests in the queue by using the minimum bit rates as bit rate allocation portions until the maximum transmission power target is achieved (Figs. 3-4).

Regarding claim 10, Raitola discloses a radio network controller (page 9, lines 4-5), comprising: a bit rate class determination unit configured to determine a number of bit rate classes (Fig. 3; page 20, lines 18-22); a bit rate setter unit configured to set minimum bit rates for the bit rate classes (Fig. 3; page 20, lines 18-22); a general bit rate setter unit configured to set a general minimum bit rate (Figs. 3-4; page 20, lines 18-22); a maximum transmission power target setter unit configured to set a maximum transmission power target (Figs. 3-7B; page 10, lines 10-11); a queue unit configured to arrange resource requests into a queue (Fig. 4); a resource allocation unit configured to allocate resources according to the requests in the queue by

using the minimum bit rates as bit rate allocation portions (Fig. 4); a bit rate increaser unit configured to increase bit rates based on the queue until the maximum transmission power target is achieved (Fig. 4); and a bit rate decreaser unit configured to decrease the required number of bit rates in a predetermined way (Fig. 6; page 18, lines 5-10).

Regarding claim 11, Raitola discloses the radio network controller of claim 10, further comprising: a bit rate class determination unit configured to determine the bit rate classes based on a required quality of service (page 20, lines 18-28; note that bit rates are in fact quality of service).

Regarding claim 12, Raitola discloses the radio network controller of claim 10, further comprising a bit rate class setter unit configured to set the bit rate classes based on a quality of service parameter, wherein the quality of service parameter comprises allocation retention priority (page 20, lines 18-32; note that the classes can be fairly characterized as being set on the basis of Allocation Retention Priority since bearers are prioritized).

Regarding claim 13, Raitola discloses the radio network controller of claim 10, further comprising wherein the bit rate decreaser unit is configured to decrease the bit rate by allocating a general minimum bit rate to a user (Fig. 7b; page 20, lines 10-16; note that the general minimum bit rate is 128 kbps).

Regarding claim 14, Raitola discloses the radio network controller of claim 10, further comprising wherein the bit rate decreaser unit is configured to decrease the bit rate by allocating the class specific minimum bit rate to a user (Fig. 6; page 20, lines 10-28).

Regarding claim 15, Raitola discloses the radio network controller of claim 10, further comprising a bit rate decrease initiation unit configured to start the decreasing of the bit rates

from a first user who has a bit rate higher than a general minimum bit rate (Fig. 7b; note that the general minimum bit rate is 128 kbps) a the lowest priority (Fig. 7b; note the second user from bottom to top), followed by a second user who has a bit rate higher than a class specific minimum bit rate and the lowest priority (Fig. 7b; note the first user, i.e., the bottom user).

Regarding claim 16, Raitola discloses the radio network controller of claim 10, further comprising a transference unit configured to transfer a needed number of users onto a control channel (Fig. 7b).

Regarding claim 17, Raitola discloses a base station (page 9, lines 27-30) comprising: a resource arrangement unit configured to arrange resource requests into a queue (Fig. 4; from page 9, line 31 through page 10, line 7); and a resource allocation unit configured to allocate resources according to the requests in the queue by using minimum bit rates as bit rate allocation portions (Figs. 3-4; from page 9, line 31 through page 10, line 3).

Regarding claim 18, Raitola discloses a base station (page 9, lines 27-30) comprising: resource arrangement unit configured to arrange resource requests into a queue (Figs. 3-4; from page 9, line 31 through page 10, line 7); and a resource allocation unit configured to allocate resources according to the requests in the queue by using minimum bit rates as bit rate allocation portions (Figs. 3-4; from page 9, line 31 through page 10, line 3); a bit rate increaser unit configured to increase bit rates based on the queue until a maximum target set for a transmission power is achieved (Fig. 4); and a bit rate decreaser unit configured to decrease a required number of bit rates in a predetermined way (Fig. 6; page 20, lines 10-28).

Regarding claim 19, Raitola discloses a radio network controller (page 9, lines 4-5) configured to: determine a number of bit rate classes (Fig. 3; page 20, lines 18-22); set minimum

bit rates for the bit rate classes (Fig. 3; page 20, lines 18-22); set a general minimum bit rate (Figs. 3-4); set a maximum transmission power target (Figs. 4-7b; page 10, lines 10-11); arrange resource requests into a queue (Fig. 4; from page 9, line 31 through page 10, line 7); and allocate resources according to the requests in the queue by using minimum bit rates as bit rate allocation portions until the maximum transmission power target is achieved (Figs. 3-4).

Regarding claim 20, Raitola discloses a radio network controller (page 9, lines 4-5) configured to: determine a number of bit rate classes (Fig. 3; page 20, lines 18-22); set minimum bit rates for the bit rate classes (Figs. 3-4; page 20, lines 18-22); set a general minimum bit rate (Figs. 3-4); set a maximum transmission power target (Figs. 4-7b; page 10, lines 10-11); arrange resource requests into a queue (Fig. 4; from page 9, line 31 through page 10, line 7); allocate resources according to the requests in the queue by using minimum bit rates as bit rate allocation portions (Fig. 4; from page 9, line 31 through page 10, line 7); increase bit rates based on the queue until the maximum transmission power target is achieved (Figs. 3-4); and decrease the required number of bit rates in a predetermined way (Fig. 6).

Regarding claim 21, Raitola discloses a base station (page 9, lines 27-30) configured to: arrange resource requests into a queue (Fig. 4; from page 9, line 31 through page 10, line 7); and allocate resources according to the requests in the queue by using minimum bit rates as bit rate allocation portions (Figs. 3-4 and 7b; from page 9, line 31 through page 10, line 7).

Regarding claim 22, Raitola discloses a base station (page 9, lines 27-30) configured to: arrange resource requests into a queue (Fig. 4; from page 9, line 31 through page 10, line 7); allocate resources according to the requests in the queue by using minimum bit rates as bit rate allocation portions (Figs. 3-4 and 7b; from page 9, line 31 through page 10, line 7); increase bit

rates based on the queue until a maximum target set for a transmission power is achieved (Figs. 3-4); and decrease a required number of bit rates in a predetermined way (Fig. 6).

Regarding claim 23, Raitola discloses a radio network controller (page 9, lines 4-5), comprising: means for determining the number of bit rate classes (Fig. 3; page 20, lines 18-22); means for setting minimum bit rates for the bit rate classes (Figs. 3-4; page 20, lines 18-22); means for setting a general minimum bit rate (Figs. 3-4); means for setting a maximum transmission power target (Figs. 3-7B; page 10, lines 10-11); means for arranging resource requests into a queue (Fig. 4); means for allocating resources according to the requests in the queue by using the minimum bit rates as bit rate allocation portions until the maximum power target is achieved (Figs. 3-4, 6 and 7b).

Regarding claim 24, Raitola discloses a radio network controller (page 9, lines 4-5) comprising: means for determining the number of bit rate classes (Fig. 3; page 20, lines 18-22); means for setting minimum bit rates for the bit rate classes (Fig. 3; page 20, lines 18-22); means for setting a general minimum bit rate (Figs. 3-4); means for setting a maximum transmission power target (Figs. 3-7B; page 10, lines 10-11); means for arranging resource requests into a queue (Fig. 4); means for allocating resources according to the requests in the queue by using the minimum bit rates as bit rate allocation portions until the maximum power target is achieved (Figs. 3-4, 6 and 7b); means for increasing the bit rates on the basis of the queue until the maximum power target is achieved (Fig. 4); means for decreasing the required number of bit rates in a predetermined way (Fig. 6; page 18, lines 5-10).

Regarding claim 25, Raitola discloses a base station (page 9, lines 27-30) comprising: means for arranging resource requests into a queue (Fig. 4; from page 9, line 31 through page 10,

line 7); and means for allocating resources according to the requests in the queue by using the minimum bit rates as bit rate allocation portions until the maximum power target is achieved (Figs. 3-4, 6 and 7b; from page 9, line 31 through page 10, line 3).

Regarding claim 26, Raitola discloses a base station (page 9, lines 27-30) comprising: means for arranging resource requests into a queue (Fig. 4; from page 9, line 31 through page 10, line 7); means for allocating resources according to the requests in the queue by using the minimum bit rates as bit rate allocation portions until the maximum power target is achieved (Figs. 3-4, 6 and 7b; from page 9, line 31 through page 10, line 3); means for increasing the bit rates based on the queue until the maximum target set for the transmission power is achieved (Fig. 4); means for decreasing the required number of bit rates in a predetermined way (Fig. 6; page 20, lines 10-28).

Conclusion

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Rohani et al. (Patent No.: 6,064,659) discloses allocating transmit power to subscriber units in a wireless communication system and Kumagai et al. (Patent No.: US 6,728,264) discloses allocating radio channels to mobile stations at a plurality of different bit rates.

11. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO

MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Marivelisse Santiago-Cordero whose telephone number is (571) 272-7839. The examiner can normally be reached on Monday through Friday from 7:30am to 4:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lester Kincaid can be reached on (571) 272-7922. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

MSC 9/15/06

MSC

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